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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,096	01/16/2004	Lalit K. Mestha	116588	4982
27074	7590	07/13/2007		
OLIFF & BERRIDGE, PLC. P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LEE, WILSON	
			ART UNIT 2163	PAPER NUMBER
			NOTIFICATION DATE 07/13/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/758,096

Applicant(s)

MESTHA ET AL.

Examiner

Wilson Lee

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term-adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 4) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/16/07</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections – 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Viassolo et al. (6,587,793).

Regarding Claim 1, Viassolo discloses a method of partitioning a reference database (172) (fig. 1) for determining a reflectance spectrum (reflectance spectra) (Col. 2, lines 60-69; Col. 4, lines 20-50; Col. 8, lines 41-56), comprising:

- establishing a plurality of clusters (fig. 3);
- identifying, for each training sample of a plurality of training samples (Col. 3, lines 39-46; Col. 4, lines 10-28; Col. 8, lines 15-30; Col. 8, lines 41-56), a most appropriate cluster (cluster used appropriately) among the plurality of clusters (Col. 9, line 21 to Col. 10, line 13) and assigning each training sample (entering training samples and obtaining cluster centers for reconstruction) to the most appropriate cluster (Col. 8, lines 15-40; Col. 14, lines 1-42; and Fig. 5), each training sample correlating a reference spectrum with a corresponding plurality of normalized illuminant sensor (LED sensor) outputs (normalized with a white title) for

reference colors (Col. 3, lines 8-49; Col. 7, lines 1-20; Col. 9, lines 21-38; Col. 12, lines 45-55).

Regarding Claim 2, Viassolo discloses that

- the establishing the plurality of clusters comprises establishing a plurality of cluster centroids (cluster center) (Col. 9, line 21 to Col. 10, line 13 and Fig. 2); and
- the identifying of the most appropriate cluster comprises obtaining, for each training sample (Col. 8, lines 15-40; Col. 14, lines 1-42; and fig. 5), a Euclidean distance (distance from the top tip of the triangle) to each of the cluster centroids (510, 520, 530, 540) (fig. 2),
- wherein the most appropriate cluster is determined to be the cluster associated with the cluster centroid (510) having the shortest Euclidean distance (fig. 2).

Regarding Claim 4, Viassolo discloses that the establishing the plurality of clusters comprises establishing a plurality of cluster centroids (cluster center) (Col. 9, line 21 to Col. 10, line 13 and Fig. 2); the cluster centroids being established through vector quantization (each triangle shows a vector formed by dots that determines the cluster center) (fig. 2).

Regarding Claim 5, Viassolo discloses that a reference database partitioned by the method, the reference database being machine-readable (obtain samples from reference database; LED readings) (Col. 3, lines 39-46; Col. 12, lines 55-62).

Regarding Claim 6, Viassolo discloses that a storage medium on which is recorded a program for implementing the method (Claim 28).


Allowable subject matter

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Wilson Lee whose telephone number is (571) 272-1824. Papers related to the application may be submitted by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The official fax number is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

7/5/07


WILSON LEE
PRIMARY EXAMINER